

The diagram illustrates a syndrome-based decoder architecture. A dashed box encloses the main processing components: a Syndrome Computer 240 and a Decoder 130. The Syndrome Computer 240 contains multiple Syndrome generator 220 blocks and a Roots ROM 210. The input $r(x)$ 122 is fed into the Syndrome generator 220 blocks. The output s_j 222 from the Syndrome generator 220 is sent to the Decoder 130. The Decoder 130 also receives $g(x)$ 114 as input. The output of the Decoder 130 is $s(x)$ 132. A feedback loop 118 connects the output $s(x)$ 132 back to the input $r(x)$ 122. A Syndrome Processor 230 is also shown, receiving inputs from the Syndrome generator 220 and the Decoder 130, and outputting $s(x)$ 132.

FIG. 2

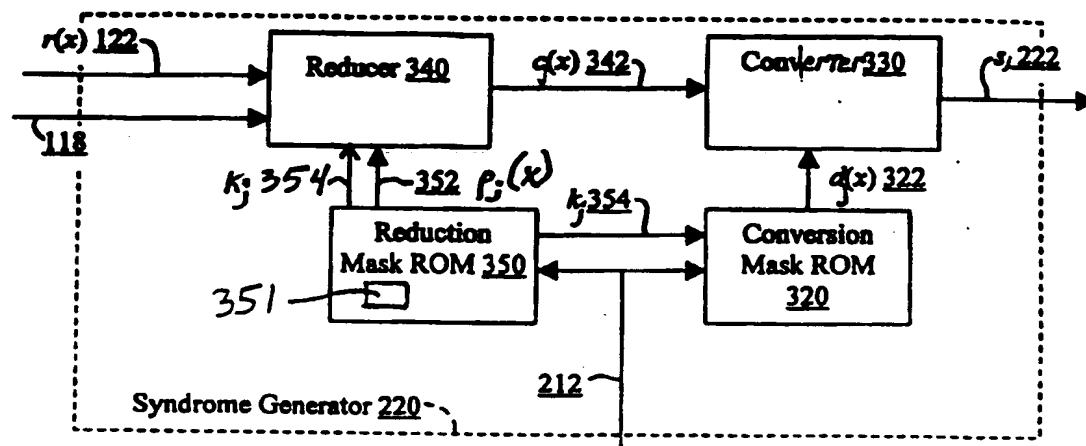


FIG. 3

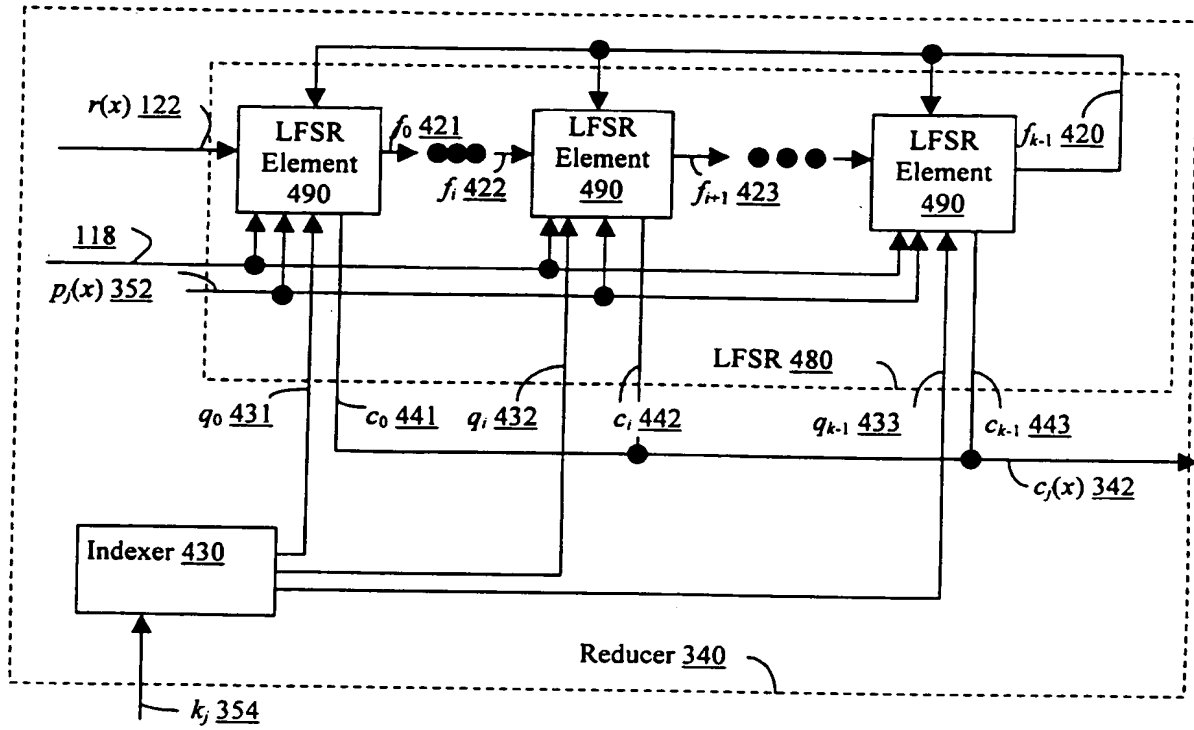


FIG. 4



FIG. 5

← 600

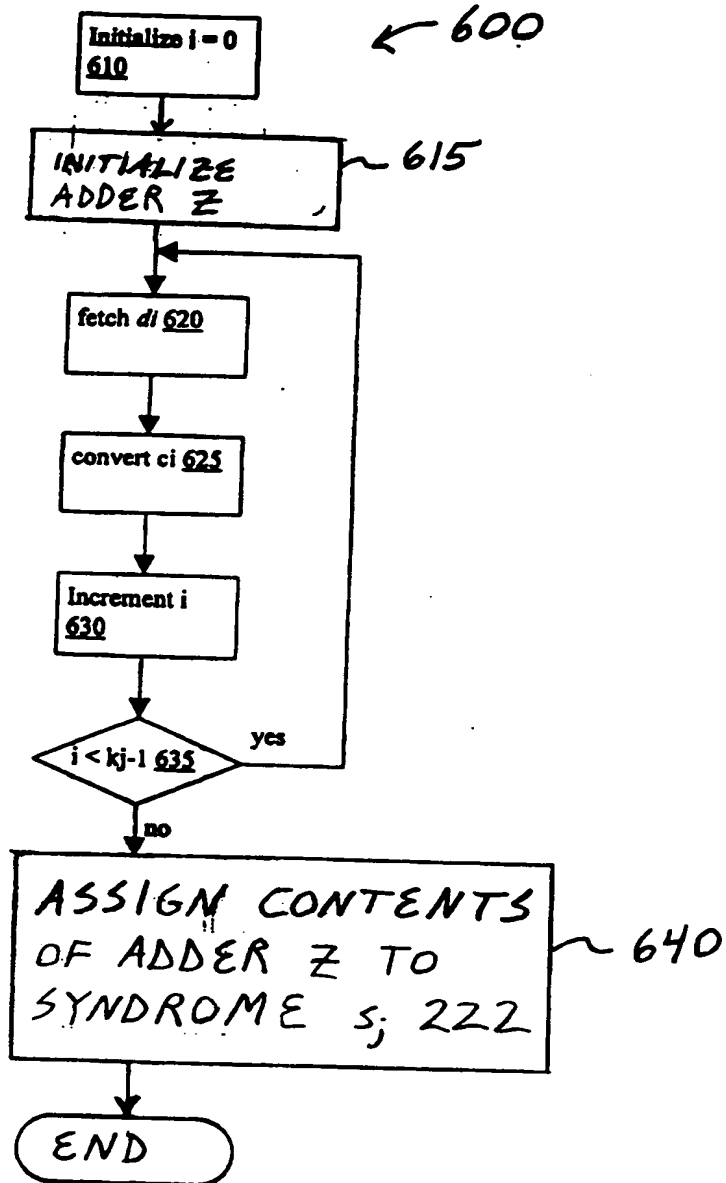


FIG. 6

240

← 700

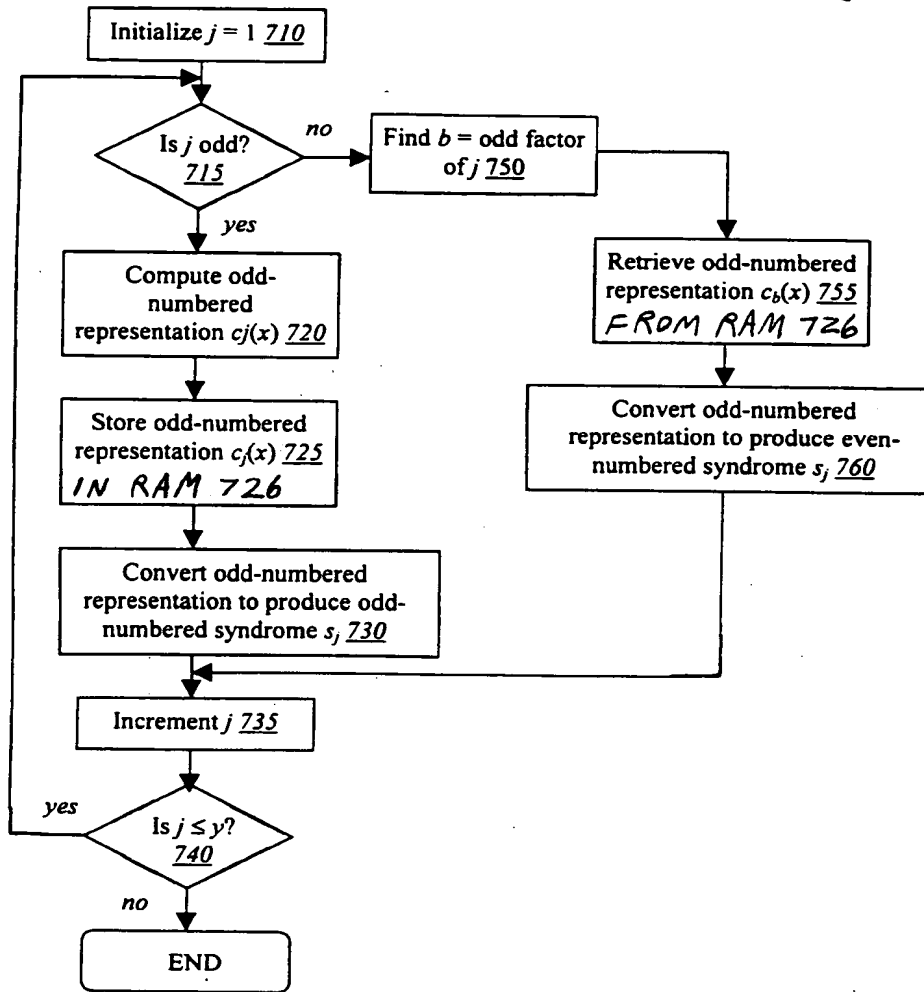


FIG. 7